UNIVERSITY OF COLORADO COLLEGE OF ARTS AND SCIENCES BOULDER, COLORADO 80302

DEPARTMENT OF
MOLECULAR, CELLULAR AND DEVELOPMENTAL BIOLOGY

April 1, 1973

Dr. Dan Nathans
Department of Microbiology
The Johns Hopkins University School of Medicine
Baltimore, Maryland 21205

Dear Dr. Nathans:

After seeing you in Squaw Valley I realized that you could be a very large help to us. We are working almost fulltime on the purification of T4 DNA from the intercistronic region of the rIIA and rIIB cistrons; the procedure we are using involves establishing single-stranded regions on either side of the piece we want (using heteroduplexes of overlapping deletions so as to provide juxtaposed single-stranded loops)* followed by S1 treatment and size-dependent fractionation. Because of the large number of deletions in rIIA and rIIB, in principle we could purify nearly any sized piece from anywhere within the two cistrons. The pieces we attempt to isolate are first examined on gels, and we have no molecular weight standards of appropriate size (our intercistronic pieces should be 100 to 500 base pairs in length). Could we obtain from you a small amount of radioactive SV40 DNA digested to completion by the H. influenzae restriction endonuclease? Judging from your talk and your December, 1971 PNAS paper, "bands" \underline{A} through \underline{K} are a perfect set of molecular weight markers in the range we need.

If such a gift would present no difficulties, we could talk on the phone to arrange some sort of shipping arrangements (303-443-2211 x7865); alternatively, I could stop by your lab the Saturday prior to the Federation Meetings, since I will be in Baltimore then to see Lindsay Black. Also, if the material is hard to come by, please feel free to say "sorry, no".

Please let me know if we can have some material, or if you have any better suggestions for molecular weight markers for double standed DNA in the size range we need. Thanks a lot for any help you might provide.

